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miniupdate

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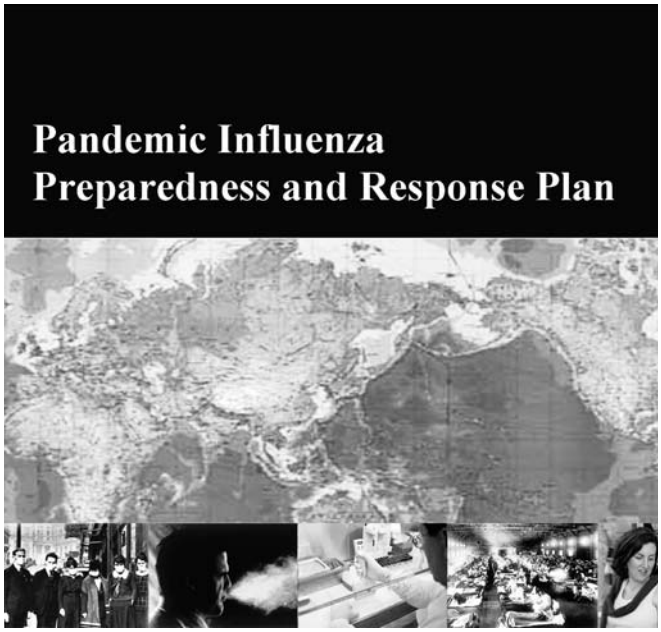
TO: Medical Directors, Community-Based Clinics
Directors, Medical Residency Programs
Directors, Nursing Schools
Interested Others

February 9, 2006

FROM: Howard Backer, MD, MPH, Chief
Immunization Branch

Below for your information and reference is an abbreviated copy of the Immunization Branch's bimonthly UPDATE memorandum. The edited version contains medical and technical information on immunization and vaccines. We hope it is helpful. If you have questions on immunizations, please contact the Immunization Coordinator at your local health department.



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Pandemic Flu Response Plan

The California Department of Health Services' draft Pandemic Influenza Preparedness and Response Plan is now available for review and comment. The plan outlines how CDHS will coordinate the public health response to a pandemic with local health jurisdictions, the healthcare community, and the federal government.

The 179-page plan is available on the CDHS web-site at www.dhs.ca.gov. Your comments can be submitted by email to panflu@dhs.ca.gov until February 24, 2006. CDHS will not provide individual responses to comments. Comments will be posted on the website. CDHS will release the final plan this spring.

DISEASE ACTIVITY AND SURVEILLANCE

The surveillance data reviewed in this section are reported in Table 1. The table includes provisional numbers of cases of *Haemophilus influenzae* type b, hepatitis A, hepatitis B, measles, pertussis, rubella, and tetanus reported in 2005 with onset in 2005 (as of December 31, 2005). For comparison, the number of cases reported in 2004 with onset in 2004 (as of December 31, 2004) is included. If you have any questions about this table, please contact Jennifer Myers by telephone at (510) 540-2118 or by email at JMyers@dhs.ca.gov.

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Pertussis: Between January and December 2005, 2,442 cases of pertussis with onset in 2005 were reported in California based on provisional data, resulting in an incidence rate of 6.63 cases per 100,000 population. This is a more than threefold increase from the 741 cases that were reported by the end of December 2004 (2.04 cases per 100,000 population). These data are preliminary, and we expect that additional cases with onset in 2005 will be reported to DHS during the first few months of 2006.

Preliminary analyses of cases with known age and race/ethnicity indicate that 23% of the cases were infants, 24% of the cases were adolescents between 10 and 18 years of age, and 34% of the cases were adults. The incidence of pertussis was highest in Hispanic infants (130.19 cases per 100,000/366 cases) and lowest in Asian/Pacific Islander infants (26.45 cases per 100,000/15 cases). Disease incidence in African American infants was 73.28 cases per 100,000 (26 cases); in White infants it was 61.85 cases per 100,000 (100 cases); and in American Indian infants it was 58.44 cases per 100,000 (4 cases). Seven pertussis deaths were reported in 2005. Five of these cases were laboratory-confirmed cases. All seven cases were ≤ 2 months of age (e.g., too young to be immunized), five of the cases were Hispanic, and two were White, non-Hispanic.

Those local health departments reporting the highest numbers of cases and/or outbreaks in 2005 included Alameda (115 cases, 7.48 cases per 100,000), Fresno (302 cases, 34.21 cases per 100,000), Humboldt (55 cases, 42.01 cases per 100,000), Los Angeles (375 cases, 3.70 cases per 100,000), Madera (77 cases, 55.48 cases per 100,000), Sacramento (120 cases, 8.6 cases per 100,000), San Diego (341 cases, 11.13 cases per 100,000), San Luis Obispo (110 cases, 41.88 cases per 100,000), Santa Clara (161 cases, 9.16 cases per 100,000), and Stanislaus (103 cases, 20.25 cases per 100,000).

California's increase in reported pertussis cases is mirrored at the national level. The reason for the nationwide increase in reported cases is not completely understood. Immunity to pertussis disease decreases approximately 5 to 10 years after vaccination or pertussis illness. As a result, B. pertussis infection is common and endemic in unvaccinated adolescents and adults. Some experts speculate that part of the nationwide increase in reported cases could be due to lessened potency of pertussis vaccines and/or waning of vaccine-induced immunity. A large part of the increase is probably due to increased recognition and diagnosis, especially among adolescents and adults.

In 2005, the Advisory Committee on Immunization Practices (ACIP) recommended that adolescents and adults be given Tdap, the recently licensed pertussis- containing vaccine for adolescents and adults, in place of the tetanus-diphtheria (Td) booster. ACIP also recommended that Tdap be given to adults who will have close contact with an infant less than 12 months of age.

Measles: In 2005, only four confirmed cases of measles were reported in California, resulting in an incidence rate of 0.01 cases per 100,000 population. This is less than the number of cases of reported in 2004 (six cases, 0.02 cases per 100,000 population).

Two of the 2005 cases were from San Diego County, one was from Santa Barbara County, and one was from Riverside County. One of the cases was an infant and three were adults. Two adult cases had histories of international travel, one to Germany and one to Asia. The third adult case was epidemiologically linked to the imported case from Germany. The source of infection of the infant case was unknown. The

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Table 1: Reported Cases with Onset in 2005 (by Age Group) and Incidence of Selected Vaccine-Preventable Diseases California, 2005 (Provisional, as of 12/31/2005)

	Age Groups				All Ages	
DISEASE	0–4 yrs	5–17 yrs	18+ yrs	Unknown	Cases	Rate
Congenital Rubella Syndrome	1	0	0	0	1	0.00
Diphtheria	0	0	0	0	0	0.00
H. influenzae, type B (Hib)[1]	1	3	0	0	4	0.03
Hepatitis A	16	102	726	7	851	2.31
Hepatitis B	0	2	311	2	315	0.86
Measles[2]	1	0	3	0	4	0.01
Mumps	12	7	23	0	42	0.11
Polio	0	0	0	0	0	0.00
Pertussis	814	760	858	10	2,442	6.63
Rubella[2]	1	0	0	0	1	0.00
Tetanus	0	0	7	0	7	0.02

1. *H. influenzae* is reportable only in people 30 years of age and under
2. Confirmed cases only
Prepared by California Department of Health Services, Immunization Branch

10-month old infant and two of the adult cases, who were brothers, had personal beliefs exemptions (PBE) to vaccination. The vaccination status of the third adult case is unknown.

Measles remains endemic in many countries, and presents a significant threat to people who live in or visit these areas. International travelers who do not have a history of the disease should have two documented doses of a measles-containing vaccine, such as MMR, prior to travel. Children are routinely given MMR vaccine at 12–15 months of age; however, children age 6–11 months should be protected against measles with a dose of MMR before traveling outside the U.S. Children who receive an early measles vaccine should be revaccinated at 1 year and at 4–6 years of age, according to the current ACIP immunization schedule.

Haemophilus influenzae: In 2005, four cases of *Haemophilus influenzae* type b (Hib) cases in individuals under 30 were reported in California based on provisional data, resulting in an incidence rate of 0.03 cases per 100,000 population less than 30 years of age. One case was 3 months old, and the other three cases were between 6 and 7 years of age. The 3-month-old case had received one dose of Hib-containing vaccine, and the other three cases had received four doses of Hib-containing vaccine. All four cases recovered. In 2004, two cases were reported: a 23-year-old who died and a 13-year-old who was hospitalized with meningitis.

Tetanus: In 2005, seven cases of tetanus were reported in California as of December 31, resulting in an incidence rate of 0.02 cases per 100,000 population. In 2004, only three tetanus cases were reported. The 2005 tetanus cases were from Alameda, El Dorado, Fresno, Madera, San Mateo, Sonoma, and Riverside Counties. The people affected ranged from 24 to 72 years of age. More detailed information on these cases is pending.

Hepatitis A: In 2005, 851 cases of hepatitis A were reported in California based on provisional data, resulting in an incidence rate of 2.31 cases per 100,000 population. This is similar to the number of cases reported at the end of December 2004 (811 cases, 2.23 cases per 100,000 population) and represents an eightfold drop from 1995 (6,773 cases, 21.12 cases per 100,000), the last peak year in California. Disease rates have been declining in all racial and ethnic groups. By 2005, the incidence of hepatitis A in Whites was 1.78 cases per 100,000 population (282 cases), 1.83 cases per 100,000 in Hispanics (242 cases), 1.28 cases per 100,000 in Asian/Pacific Islanders (55 cases), 1.38 cases per 100,000 in African Americans (34 cases), and 0.34 cases per 100,000 in American Indians (1 case). These rates do not include the 237 cases that had other or unknown race or ethnicity. The majority of cases (83%) were adults, and 41% of the cases were reported from Los Angeles County, which reported several outbreaks in 2005.

Hepatitis B: In 2005, 315 cases of hepatitis B were reported in California based on provisional data, resulting in an incidence rate of 0.86 cases per 100,000 population. This represents a decrease from the 432 cases that were reported by the end of December 2004 (1.19 cases per 100,000 population) and a 19-fold decrease from 1985 (5,969 cases, 22.61 cases per 100,000 population), the last peak year in California. By 2005, the incidence of hepatitis B was 0.90 cases per 100,000 (22 cases) in African Americans, 0.77 cases per 100,000 (33 cases) in Asian/Pacific Islanders, 0.60 cases per 100,000 population (95 cases) in Whites, 0.41 cases per 100,000 (54 cases) in Hispanics, and 0.34 cases per 100,000 (1 case) in American Indians. These rates do not include the 110 cases with other or unknown race or ethnicity. Four cases were reported in 16–18 year olds. These cases are still being reviewed.

Rubella and Congenital Rubella Syndrome (CRS): One confirmed Congenital Rubella Syndrome (CRS) case and one neonatal rubella infection were reported by Los Angeles County in 2005. The confirmed CRS case was detected in January 2005 by a geneticist who was evaluating a 21-month-old child with bilateral hearing loss and pulmonic stenosis. The child was born in the U.S. inApril 2003 to a Nigerian woman who had a history of a rubella-like illness in her first trimester. In May 2005, CDC performed a rubella IgM ELISA test on a blood spot collected from the infant at birth, and the sample tested rubella IgM positive.

The neonatal rubella case was born in May 2005 at 35 weeks gestation with intrauterine growth retardation. The mother, who came from Bangladesh, had a history of a rubella-like illness in her fifth month of pregnancy. At delivery, the mother had very high rubella IgG titers, and the infant had rubella IgM antibody. At the time of birth the infant did not display symptoms of CRS other than intrauterine growth retardation. Specimens collected at birth and at 1-1/2 months were negative for rubella virus by RT-PCR performed at CDC.

The last confirmed cases of rubella in California occurred in 2002, when three cases were reported; the last congenital rubella syndrome was reported in 2000. The extremely low incidence of rubella suggests that the indigenous transmission of rubella may have been interrupted in California.

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ASSESSMENT ACTIVITY

CASA Results Highest In 13 Years

To measure the immunization status of children served by 139 local health department clinics and 172 community health centers (CHCs), local staff collected immunization records from all 2-year-olds attending the clinics (n=31,699) and entered them into CDC's Clinic Assessment Software Application (CASA). Statewide coverage increased by 2.1% for health department clinics (70.0%, ±0.76%) and 3.3% for CHCs (76.7%, ±0.62%) since last year's assessments.

Thanks to the hard work and dedication of local health department and clinic staff, immunization coverage levels for 2-year-olds seen in public clinics continue to increase. In fact, CHC coverage levels are approaching the 2004 National Immunization Survey estimate of 4:3:1:3:3 coverage (4 DTP, 3 polio, 1 MMR, 3 Hib, 3 Hep B) by 24 months of age in California (81.3%, ±3.4%), which means our public clinics provide comparable immunization services to the private clinics.

IMMUNIZATION SERVICES

Recommended Childhood and Adolescent Immunization Schedule, 2006

Attached in this edition of the ☛ mini Update is a copy of the 2006 schedule. The 2006 schedule and recommendations are increasingly complex, but they greatly expand vaccine protection, especially to adolescents. More detailed descriptions and catch-up schedules are available at www.cdc.gov/nip/recs/child-schedule.htm. Highlights of the 2006 schedule include:

- Reemphasis on the birth dose of hepatitis B and permissibility of four doses of hepatitis B vaccine to accommodate combination vaccines. These changes reflect the ACIP's new infant- and children-specific hepatitis B recommendations, which were published in December, 2005. Providers and immunization program staff are encouraged to review the entire document at www.cdc.gov/mmwr/preview/mmwrhtml/rr5416a1.htm.
- Recommendations for a dose of Tdap and meningococcal conjugate vaccine (MCV4) for all 11 and 12 year olds and other groups at risk. These vaccines, licensed in 2005, will significantly increase protection against specific diseases for adolescents.
- Influenza vaccine continues to be recommended for all children 6 to 23 months; all children over 6 months at risk for aspiration of respiratory secretions have been added to high-risk groups for influenza vaccine.
- Tdap is now recommended as the vaccine choice for a single booster dose when any of the antigens are indicated.
- Hepatitis A vaccine is now universally recommended for all children at 1 year, with a booster six months later.

The 2006 revision of the Immunization Branch's "Everything" poster, which includes the schedule along with other frequently requested tables and information, is being updated and will be included in the April UPDATE.

05/06 Adult Immunization Schedule

The Advisory Committee on Immunization Practices (ACIP) has approved an adult schedule for October 2005–September 2006. The schedule provides "at-a-glance" information for different age groups and the important indications of each vaccine. A copy is enclosed with this ☛ mini UPDATE. The new schedule replaces the 04/05 release.

Medi-Cal Reimbursement for Hepatitis A and B Combination Adult Vaccination

Medi-Cal will now reimburse providers for combination hepatitis A and hepatitis B vaccine for eligible adults, effective December 1, 2005. The CPT-4 code 90636 (hepatitis A and hepatitis B combination vaccine) is reimbursable for any recipient 19 years of age or older who is at risk of developing hepatitis A and/or hepatitis B due to:

- Receiving blood factor products, either for the treatment of a medical disorder or as an occupational exposure
- Chronic liver disease
- Liver transplant
- Using illicit injectable or noninjectable "street" drugs
- Is a male having sex with other males
- Individuals in high risk situations, such as day-care centers, hemodialysis units, drug and alcohol treatment centers, correctional facilities, and places where emergency medical assistance is rendered
- Has come in contact with blood, body fluids, feces or sewage
- Has come in contact with live hepatitis A and/or B virus

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VACCINE RISKS AND BENEFITS

California Physicians Notified About New Vaccine Law

In January, the Immunization Branch sent a letter to California physicians about implications of Chapter 837, Statutes of 2004, *The Mercury Free Act* (AB 2943), particularly as it relates to flu vaccine. The law, which takes effect July 1, 2006, prohibits health care providers from administering mercury-containing vaccines to pregnant women and to children under age 3. Physicians were encouraged to preorder sufficient quantities of mercury-free flu vaccine to meet the needs of their patients who will be under 3 or pregnant during the 2006-07 flu season. A copy of the letter is posted on the Immunization Branch website at www.dhs.ca.gov/ps/dcdc/izgroup/pdf/OrderingFluVaccine_MercuryLaw.pdf. The state law text can be viewed at www.leginfo.ca.gov/pub/03-04/bill/asm/ab_2901-2950/ab_2943_bill_20040928_chaptered.html.

VACCINES FOR CHILDREN (VFC) PROGRAM

VFC Annual Recertification Underway

Private sector sites will be receiving their annual recertification packets by the end of February, and must be returned to us in early April. We are pleased to note that private sector enrollment in the VFC program increased by 220 during 2005. This is a nearly ten percent (9.45%) increase over the 2004 number of new sites.

PROFESSIONAL INFORMATION AND EDUCATION

40th National Immunization Conference

Immunization: The Cutting Edge of Public Health will be the annual theme of the 2006 NIC conference. The conference will take place March 6-9, 2006 at the Omni Hotel at CNN Center in Atlanta, Georgia. For additional information about the conference, please visit their website at www.cdc.gov/nip/nic.

Reminder: CDC's Annual Four-Part VPD Satellite Course

Don't miss CDC's annual live four-part satellite broadcast "Epidemiology and Prevention of Vaccine Preventable Disease," 9 am to noon on four consecutive Thursdays: February 9, 16, 23, and March 2. This live, interactive program will provide the most current information available in the constantly changing field of immunization. Private and public health care providers, clinic staff, and anyone giving immunizations or setting policy for their offices will benefit from the course. Continuing education credits (CEs) will be offered.

CDC Publishes New Edition of Travel Book

The 2005–2006 edition of CDC's Health Information for International Travel (AKA "The Yellow Book") is now available. This edition, which has been completely revised, updated, and reorganized, now includes references listed at the end of each section. Sections of the book have been expanded substantially, including those covering immunosuppressed travelers, disabled travelers, cruise-ship travel, and children who travel. New sections have been added on air travel, norovirus infection, SARS, and legionellosis. Copies can be ordered through the CDC Travelers' Health website at www.cdc.gov/travel.

Epidemiology and Prevention of Vaccine-Preventable Diseases, 9th Edition

The 9th edition of CDC's Epidemiology and Prevention of Vaccine-Preventable Diseases ("The Pink Book") will be available in February 2006. The Pink Book provides physicians, nurses, nurse practitioners, physician assistants, pharmacists, and others with comprehensive information on vaccine-preventable diseases. It also provides the latest information on general recommendations on immunizations, immunization strategies for health care practices and providers, strategies to increase vaccination, revised recommendations, and vaccine safety. The Pink Book is published by the National Immunization Program, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

PUBLIC INFORMATION AND EDUCATION

Pertussis Flyer Revised

Now that the Tdap vaccine is available for teens and adults, the pertussis flyer, IMM-817 E, has been revised to include Tdap as another way to protect infants by protecting parents and other family members. A copy of the updated flyer in English is enclosed in this ☛ mini UPDATE and is available for download at www.GetImmunizedCA.org. The Spanish translation is in the process of being updated as well. Other Tdap and pertussis flyers are in development and will be announced in future UPDATES as they become available.

Adult Disparities: Your Doctor's Recommendation Makes a Difference

In 2002, the Centers for Disease Control and Prevention

launched a three-year project Racial and Ethnic Adult Disparities in Immunization Initiative (READII) to investigate immunization disparities and increase pneumococcal and influenza vaccination rates in older people in U.S. sites. The project used physician-based interventions and community campaigns aimed at increasing vaccination. Initial data on pneumococcal and influenza vaccination of Medicare beneficiaries at these sites indicate pneumococcal vaccination coverage was 70.3% for Whites, 40.8% for Blacks, and 53.2% for Hispanics. Provider recommendation and awareness of vaccination were associated with higher pneumococcal vaccination.

Influenza vaccination coverage was 76.2% for Whites, 50.7% for Blacks, and 65.7% for Hispanics. Again, provider recommendation was associated with influenza vaccination. More Blacks and Hispanics than Whites believed they become sick from prior influenza vaccination, and this belief was associated with lower vaccination rates. More information about the READII project and the results of the survey are described in an article on the online edition of the Journal of the American Geriatrics Society: www.blackwell-synergy.com/doi/abs/10.1111/j.1532-5415.2005.00585.x.

INFLUENZA AND PNEUMOCOCCAL ACTIVITIES

Prebooking 2006 Flu Vaccine

Prebooking of Flu vaccine for Fall 2006 is underway. As noted above, the new law about mercury-free vaccines makes it especially important for providers to prebook thimerosal-free flu vaccine for their patients who are under 3 or are pregnant. The amount of thimerosal-free (i.e. single dose vials or syringes) vaccine that will be available this fall is uncertain at this time.

IZ COALITION ACTIVITIES

CA Adult Summit, May 1, 2006

Save the date! The 6th Annual California Adult Immunization Summit, sponsored by the California Adult Immunization Coalition (CAIC), will be held on the first day of May at the Elihu Harris State Building, Oakland, CA. The 2006 theme is "Influenza and Much More: New Immunizations and New Strategies." Registration forms and other summit details will be available at the CAIC website (www.immunizeCAadults.org) after March 1, 2006. For information regarding the CAIC, contact Patricia Porter, RN, MPH at patricia.porter@ucsf.edu.

MISCELLANEOUS

Update Index

Enclosed in this ☛ mini UPDATE is the UPDATE Index for 2005. If you are looking for a past UPDATE article, this is the place to look; articles are listed by category with the month and the page on which it appeared.
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